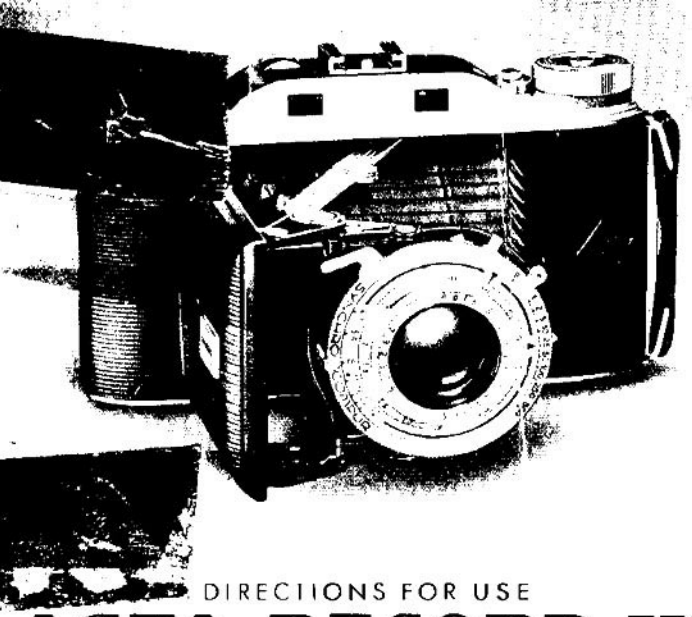
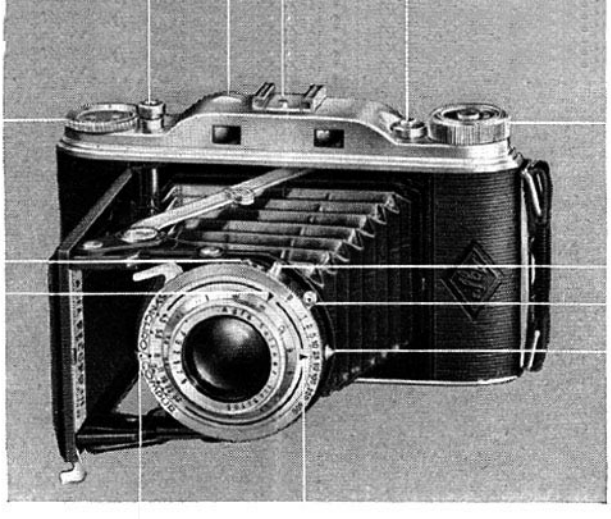


Agfa

MADE IN
GERMANY

DIRECTIONS FOR USE

AGFA RECORD III


Depth of field ring
Shifting lever for
ronisation X and M
ocusing index mark
Film transport knob
Contact nipple for flashlight
Shutter cocking lever
Selftimer button
Stop setting lever
Exposure time setting mark

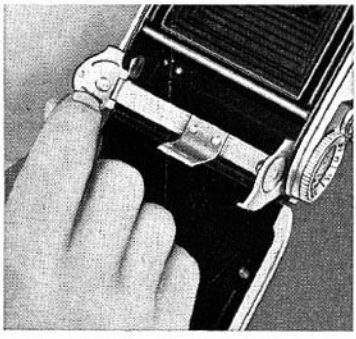
AGFA RECORD III with built-in combined range-viewfinder

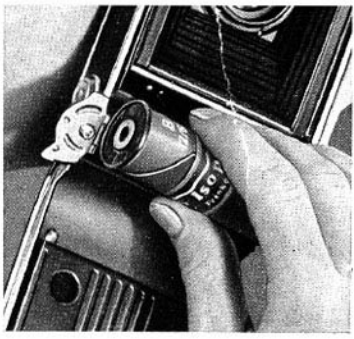
Agfa Apotar 1 : 4,5, f = 105 mm in Prontor SV shutter, fully synchronised
Order Nr. 1470/315

Agfa Solinar 1 : 4,5, f = 105 mm in Synchro-Compur shutter, fully synchronised
Order Nr. 1470/313

The Agfa Record III camera is fitted with the highly efficient lenses Agfa Apotar and Agfa Solinar 1 : 4,5, f = 105 mm (4,1 ins.) which, owing to their excellent correction, are extremely suitable for black-and-white as well as colour photography. The anti-reflex coating of these lenses ensures maximum light transmission and a certain increase of practical speed, an increased brilliance of the negative and a far reaching prevention of all those disturbances which are sometimes caused by reflextions from the surfaces of the lenses such as flares, "ghost-images" and haze.

The camera is used with the normal 120 film 2¼ × 3¼" (6 × 9 cm) yielding 8 negatives of this size. The built-in range-finder combined with the viewfinder allows for the immediate and correct finding of the distance between the object and the camera and the distance thus ascertained can easily be transferred to the focussing ring of the lens. The following photographs explain the necessary manipulations. We recommend to study them carefully — especially the handling of the shutter and the rangefinder — and to put them into practice with the unloaded camera before you attempt any actual exposure.





LOADING THE CAMERA

1 Push the locking catch underneath the carrying strap in the direction of the arrow and open the camera back. Load camera always in subdued light only.

2 Take out the film holder on the hinge of the back and swing hinged flap outward. In the film chamber with the film-winding knob ought to be an empty spool.

3 The spool with the groove or slit should first be put on fixed pivot, then the hinged flap with pivot inserted into the circular bore hole. Spool is now firmly held by both pivots. Swing spool holder back into its place.

Caution: Make sure that the spool is in its place exactly as the picture shows. The pointed end of the cover-paper should point to the empty take-up spool. (Loading of empty spool see page 16.)

4 Threading the film: Rip open the seal on the film and remove it carefully. Roll off a small part of the cover-paper, but mind that the spool does not unroll. Push the pointed end of the cover-paper into the wide slot of the empty take-up spool.

5 Give the film-winding knob a few turns to tighten the cover-paper and make sure that the paper between the two flanges winds up in a straight way so that the film is protected against light.

6 To close the back of the camera take the camera in both hands and press the back firmly towards the camera body until the lock catches audibly.

When turning the film-winding knob further on, in the open film counting window at first the usual pre-signals will appear: dots, hands or arrows. When No. 1 appears stop turning the knob. The film is now ready for the first exposure. When turning the knob the window must be kept open by pressing the small lever above it sideways.

HOW TO OPEN THE CAMERA

A slight pressure of the locking knob and the self-erecting mechanism is gliding into the taking position. If it does not catch audibly a little help should be given, this may be the case in cold weather or when the camera has not been used for a long time.

Caution: It has to be borne in mind that the shutter release knob should not be pressed by mistake when the camera is opened in order not to interfere with the mechanism to prevent double exposure. (See prevention of double exposure page 15.)

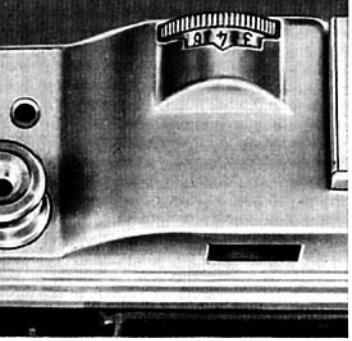
THE COMBINED RANGE VIEWFINDER.

The **optical viewfinder:** The circular eye-piece of the combined view- and range-finder should be held as near as possible to the eye in such a way that the whole picture area is fully visible right up the corners.

Because the optical axes of the lens and the viewfinder are not at the same level, the so-called parallax has to be considered when making close-ups. When taking horizontal pictures at a distance less than 7 ft. (2 m) — but then only — the parallax causes the viewfinder to show too much of the upper part of the subject and too little of the lower part. The camera has, therefore, to be lifted a little in the direction of the viewfinder. When taking vertical pictures the camera must accordingly be swung slightly in the direction of the finder.

The viewfinder shows the image in a light tint, but has in its centre a circular bright spot. This spot serves for the rangefinding.

It is a good idea to cover the frontal opening of the viewfinder — the one besides the shutter release knob — with a finger. You will appreciate the now one-colored picture in the viewfinder which makes the composing of the picture so much easier. Only when the distance is measured should the finger be lifted. This method has, by the way, the advantage that the sudden appearance of a different color makes the double lines of the small range-finder picture especially clear.



When turning the milled indicator-ring — which is preferably to be done with the index-finger of the right hand — vertical lines within the bright centre-field will be seen moving towards each other. The ring must be turned on until the two images or lines merge into one picture or line. (See picture on page 7.)

When this has been achieved the correct distance between the camera and the subject can be read off from the indicator ring. (In the photograph 13 ft. = 4 m.) The distance thus established on the indicator ring can now be transferred to the lens by turning the metre-ring (ft.-ring) of the lens to the black mark in the centre of the shutter. Intermediate distances found with the range-finder can be transferred accordingly (see picture on page 9).

Another technique of measuring the distance which has proved to be excellent and most helpful, is this:

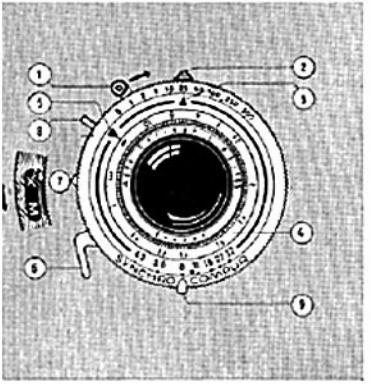
The distance between the subject and the camera should be estimated and this approximate distance transferred to the distance scale of the lens as well as to the indicator-ring of the range-finder. Then move with the camera backward and forward until the two images in the range-finder merge into one. Moving subjects, a procession, for instance, are easier caught when the photographer himself chooses the most favourable distance, adjusts lens and rangefinder to this distance and lets the object move on to this distance. The photographer then has nothing to do but follow the movements of the object in the viewfinder and press the release knob the moment the clear centre picture indicates the best definition when the vertical lines have come to coincidence.

THE FULLY SYNCHRONIZED SHUTTERS OF AGFA RECORD III

Iris diaphragms (stops): 4,5 5,6 8 11 16 22 32
Distances in feet: 3 3.5 4 5 6 8 10 15 30 ∞
Shutter speeds: B 1 2 5 10 25 50 100 250 (and 500 with Synchro-Compur)
The figures on the shutter ring are fractions of seconds, for example 2 = 1/2 second, 50 = 1/50 second.

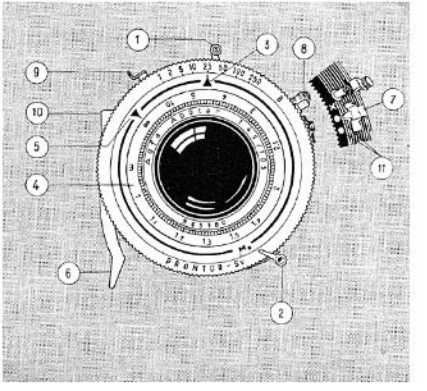
1) Cocking lever for shutter: Shutter requires cocking before each exposure — also when "B" is used.
2) Lever for delayed action release. Not to be used for "B" — Delay about 7 seconds. Operation: 1) Cock the shutter. 2) Turn lever 2 to the left (towards bellow when using Compur) and cocking lever 1 as far as it will go. 3) Press exposure trigger in the usual way.
3) Marking for adjustment of shutter speed: Turn milled outer ring, mark 3 indicates wanted shutter speed.
4/5) Turn front lens 4. Mark indicates wanted distance.
6) Lever for the release of the shutter.
7) Shifting lever for "X" or "M" synchronisation.
8) Contact nipple for flash-light, 3 mm diam.
9) Lever for diaphragms (stops) and scale.

Regarding 7 and 11 see the special instructions for fully synchronized shutters.



SYNCHRO-COMPUR

Setting the shutter speeds: When turning the shutter to $^1/_{500}$ second a marked resistance will be felt. $^1/_{500}$ must, therefore, always be set first and only then the shutter should be cocked. Doing it the other way round makes it extremely difficult to overcome the tension of the additional spring.



PRONTOR SV

10) Nipple for cable release.
11) Marks "Red X" and "Yellow" for full synchronisation "X" or "M".

ADJUSTMENT OF SHUTTER SPEED AND DIAPHRAGM

Some advice for the exposure of your pictures is given on page 18. The values thus established should be transferred to the shutter and the diaphragm. The scales of both the shutter-speeds and diaphragms are easily readable from above when the camera is in the taking position. Turn the speed figure wanted on the shutter ring to the black mark and cock the shutter by shifting the cocking lever. Then move the lever of the iris-diaphragm to the number of the stop wanted.

THE DEPTH OF FIELD

Any serious amateur should know the meaning of the "depth of field" and should generally make an intelligent use of it, because it makes photography of moving objects so much easier. Depth of field is the simultaneous definition of both comparatively near and distant objects with a sufficient degree of sharpness before and beyond the point on which the lens has been focused. When focusing on a nearer subject the zone of sharpness is less than by focusing on a distant point.

Large aperture
e. g. 4,5

great speed,
but small
depth of field.

Small aperture
e. g. 22

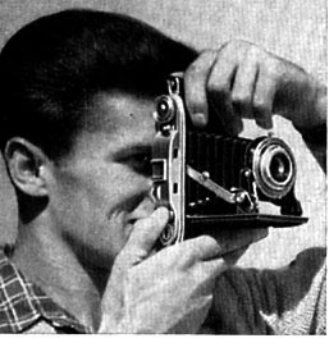
small speed,
but great
depth of field.

With a small stop (large figure) the depth of field will be greater, but the speed of the lens will, of course, decrease. The depth of field table on page 19 contains all ranges of depth of field for many different stops and distances.

Two-points focusing is the easiest and most simple way of exploiting the depth of field of a lens. The lever of the iris-diaphragm is set to the red mark between the stops 8 and 11 and the metre-ring set to the red 3 or 10 m (resp. 10 ft. or 30 ft.). Then make a note of these settings:

	Focused on:	Depth of field:
Diaphragm (Stop): between 8 and 11	10 ft. or 3 m (near)	2,5 to 5 m (8 ft. to 16 ft.)
	30 ft. or 10 m (far)	5 m to ∞ (16 ft. to ∞)

To have the figures of the depth of field always handy the "Record III" is fitted with a depth of field ring, which shows clearly that the depth of field increases or decreases according to the proportion of the aperture of the lens to the distance. Set the depth of field scale so that the stop 1 : 8 points to the fixed figure of 10 feet. The lines to the right and the left of the number 8 indicate that the depth of field at this combination lies between 8 ft. in the foreground and 13 ft. in the background, that is to say, everything within this range is of a satisfactorily sharp definition.



HOW TO TAKE PHOTOGRAPHS WITH THE AGFA RECORD III

The picture on page 6 shows how the camera should be held when making horizontal shots. The shutter should be released with the index-finger of the right hand, which slightly glides from the indicator ring of the range-finder to the release knob. When taking vertical shots the camera should be supported with the right hand — as shown in the picture — and the shutter released with the thumb.

During the exposure the camera must be held firmly. The stability of the camera is very important, but with an exposure time of $^1/_{25}$ sec. it should be possible to obtain pictures without any camerashake. But even in this case it will be necessary to take a firm stand and to press the elbows firmly against the body. The camera should never be tilted, but kept level.

The shutter must be released by a squeezing action between the index finger on the release knob and the thumb on the body of the camera at a point diametrically opposite the release knob.

THE PREVENTION OF DOUBLE EXPOSURE

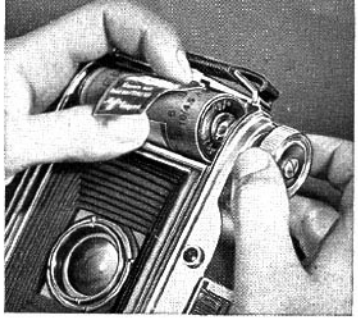
For the following exposure turn the film-winding knob until the next film number appears in the film counting window.

Film transport and shutter are ingeniously interlocked in Agfa Record cameras to prevent double exposure. After each exposure the body release knob on the camera is automatically blocked — a red dot in the small window next to the release knob indicates that it is locked —; it can be used again only after the film has been wound on. When turning the film-winding knob an audible click announces that the locking mechanism is put out of action and the red dot disappears. It is, therefore, important to transport the film only just before the next exposure will be made.

If the body release has by a mistake been operated when the camera was opened for the first exposure (see page 6), the camera must be opened and closed again in the ordinary way and according to the instructions. But even in this case the body release will still remain blocked. To prevent losing film by transporting it unnecessarily the shutter should be released then by using the small release lever on the shutter itself.

HOW TO CLOSE THE CAMERA

After a slight pressure with both the index fingers on the joints of the struts the baseboard will fold up and snap in audibly when firmly pressed towards the camera body. Make sure that the small base board foot has been swung back if it was used for taking a horizontal picture.



UNLOADING THE CAMERA

After the last, the 8th shot, the film winding knob is turned on and on until the end of the cover paper appears in the film counting window. Now open the back of the camera (see page 4), draw back the film winding knob and take out the full take-up spool in such a way that the cover paper does not unroll. Fold end of the paper sharply, stick seal on film spool and keep the film in a light-tight place.

Swing film holder outward and take empty spool out. Transfer the empty spool to the opposite film chamber. To this purpose draw the film winding knob back once more, put the empty spool at first with the circular hole on the fixed pivot and press it into the film chamber. Then turn the film winding knob and press it carefully down so that the groove of the spool engages the prongs of the film winding knob.

Exposure Table

Negative material $^{18}/_{10}$°DIN or: ASA Exposure Index 50

Time of Day: 3 hours after sunrise until 3 hours before sunset

Subject	Season	Sunny	Overcast	Dull	Time of exposure sec.
		Aperture			
Bright scenes, snow, beach, etc.	Summer	16	11	8	$^1/_{100}$
	Winter	11	8	5,6	$^1/_{50}$
Children, outdoor groups, landscapes, etc.	Summer	8	5,6	4,5	$^1/_{50}$
	Winter	5,6	4,5	–	$^1/_{25}$
		–	–	4,5	$^1/_{10}$
Light room, close to window	Summer	5,6	4,5	–	$^1/_{10}$ – $^1/_5$
		–	–	4,5	$^1/_5$ – $^1/_2$
	Winter	5,6	4,5	–	$^1/_2$ – 1
		–	–	4,5	1 – 2

When using 'Yellow Filter No. 1 open lens aperture one measurement more than usual (next smaller figure) or double the time of exposure.

When in doubt it is advisable to rather expose longer than too short.
Very simply, however, you will obtain the proper exposure time with the new photoelectric exposure meter **Agfa Lucimeter** which guarantees highest accuracy even under difficult light conditions.

Depth-of-Field Table

for Agfa Solinar and Apotar 105 mm.

Lens focused for distance of (feet):	Lens set for:						
	f/4,5	f/5,6	f/8	f/11	f/16	f/22	f/32
	Sharp definition will be obtained within range given (feet):						
3	2,9—3,1	2,9—3,1	2,8—3,2	2,8—3,3	2,7—3,4	2,6—3,6	2,4—3,9
3,5	3,4—3,7	3,3—3,7	3,3—3,8	3,2—3,9	3,1—4,1	2,9—4,3	2,7—4,9
4	3,8—4,1	3,8—4,2	3,7—4,3	3,6—4,4	3,4—4,6	3,3—4,9	3,0—5,6
5	4,6—5,2	4,6—5,3	4,4—5,5	4,3—5,8	4,0—6,3	3,8—7,0	3,4—8,7
6	5,6—6,5	5,5—6,6	5,3—6,7	5,1—7,3	4,8—8,0	4,5—9,2	4,0—12,0
8	7,4—8,9	7,2—9,1	6,8—9,7	6,5—10,0	6,0—12,2	5,5—15,1	4,8—25,0
10	9,1—11,3	8,5—11,6	8,1—12,6	7,6—14,0	6,8—17,5	6,1—24,5	5,3—76
13	11,3—15,6	11,0—16,4	10,2—18,3	9,5—21,5	8,4—30,2	7,4—58	6,2—∞
20	15,9—25,9	15,2—28,1	13,8—34,4	12,4—61	10,6—108	9,1—∞	7,3—∞
30	21,9—48	20,6—56	18,1—87	15,8—306	13,0—∞	10,7—∞	8,3—∞
50	30,9—131	28,3—216	23,8—∞	19,9—∞	15,7—∞	12,4—∞	9,3—∞
∞	80—∞	64—∞	45—∞	33—∞	22,7—∞	16,4—∞	11,3—∞